Pompano Beach Fire Rescue

PERFORMANCE BRIEF

3RD QUARTER REPORT
FY 2015

120 SW 3rd Street, Pompano Beach, Florida 33060

Pompano Beach Fire Rescue

NOTES

This report highlights the Pompano Beach Fire Rescue's emergency response activities (i.e., call volume and response time) for the period ranging from October through June of FY 2015. Data for the period are compared with previous comparable periods to monitor trends in an effort to gain insight into performance. In this respect, two basic questions are addressed: What was the level of service demand from October through June of FY 2015? And how did the fire department perform?

All years referred to in this document are fiscal years. Numbers in the text, tables or charts may not add up to totals because of rounding. The sum of zone totals may not add up to total incident due to computer data input errors and/or the exclusion of Mutual Aid data incidents from zone totals. The sum of dispatch time, turnout time, and travel time may not add up to total response time since there are instances where dispatch time, turnout time, or travel time data are not available to be included in the calculation of response time.

Incidents data are spread over 24 hours and divided among 14 fire-rescue units, including a rescue van[1] which operates 12 hours a day to help provide coverage primarily to Zone 52. See the incidents response map in Page 9. Since data for earlier years or periods may have been revised, readers are always encouraged to use the data from the most recent Performance Brief publication. In other words, the information released in this publication is based on preliminary data and always subject to change in the future.

Coverage Area - From an emergency response strand point, geographically, the city is divided into six *zones*; each with a dedicated fire station. The zones are not divided equally, with similar demographics and population density. For instance, of the six fire stations, only one is located west of Intestate-95 where most of the city population growth has occurred in the last twenty years. The fire department also provides emergency coverage for the contract service area of the Village of Sea Ranch Lakes, referred to as Zone 12C in the document, theoretically treated as a seventh zone. Sea Ranch Lakes is located about one mile south of Pompano Beach's city limits along AIA.[2] In addition to Sea Ranch Lakes, the City of Pompano Beach has an Automatic-Aid agreement with the City of Lighthouse Point (located just north of Pompano along Federal Highway), calling for Lighthouse Point Fire Rescue to commit an aerial ladder truck automatically to all Pompano Beach commercial fires while Pompano would respond to all of Lighthouse Point's structure fires.[3]

The 9-1-1 System – Emergency calls go through the steps illustrated in Page 3. Two agencies (Pompano Beach Fire Rescue and the Broward County Dispatch Center) are involved in the process, and together they impact overall response time. Following are the phases through which the call goes:

At the Dispatch Center, the call taker takes the information (Phase I) from the person calling 9-1-1 and transfers it to the dispatcher who then alerts the fire department (Phase II). These events are exclusively under the control of the Dispatch Center.

Firefighters take the call/leave the fire station (Phase III) and travel to the scene of the incident (Phase IV).

Response time is impacted by (1) how long it takes the call taker and the dispatcher to process and transfer the call to the fire department and (2) the time it takes firefighters to react/leave the fire station and travel to the scene.

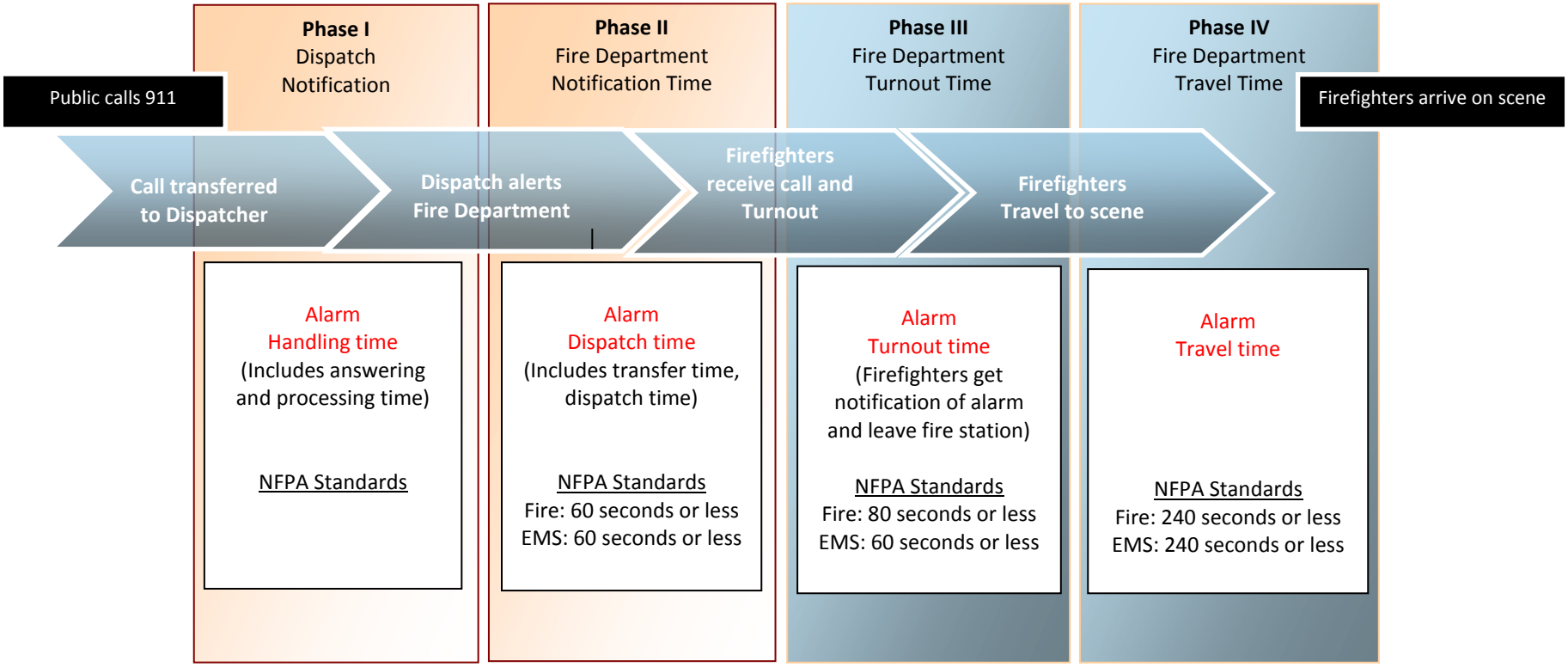
Thank you for your interest in the organization; your comments and suggestions for how to improve this document are always welcome. This report is also available on the fire department webpage.

[1] Staffing – overtime - expenses for this service average $0.5 million per year.

[2] The service contract between the City and the Village of Sea Ranch Lakes generates $194,000 annually; it primarily pays for the cost of staffing the third paramedic on the beach rescue vehicle.

[3] There is no monetary obligation for either party.

Incident Response Phases and NFPA Standards



Note: In 2001, subsequently revised in 2004, the National Fire Protection Association (NFPA) established standards for fire and emergency medical responses known as NFPA Standard 1710 ("NFPA 1710"). Among others, NFPA 1710 includes response time goals for various stages of response to an emergency incident. See National Fire Protection Association. (2004). *Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Career Fire Departments*, 2004 Ed. (Standard 1710) Quincy, MA: Author.
Note, this is not a legal mandate. These are recommended guidelines that the National Fire Protection Association is encouraging municipalities to follow based on volume of studies from reputable institutions.

TREND NOTES

Trends against the performance indicators reviewed in the report are shown in the "movement" column, using the following symbols:

∇ Down from comparable period
⇔ Steady or no movement
Δ Up

The symbol color indicates whether the movement is favorable or unfavorable to the fire department or is ultimately in the interest of the community in general.

Red Δ = Unfavorable
Green ∇ = Favorable)

POPULATION ESTIMATES

Pompano Beach Population estimates for FY2013, FY2014, and FY2015 are 104780, 106105, and 106105 respectively plus 670 for Sea Ranch Lakes. US Census
http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=bkmk

Estimates for prior years are from City of Pompano Beach Comprehensive Annual Financial Report (CAFR), FY2013.

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Mission

The mission of Pompano Beach Fire Rescue (PBFR) is to preserve life and property, promote public safety and respond to all calls for emergency assistance within the community. This mission is performed around the clock with all due regard for the dignity of each person we serve. In terms of priority, we want to help Pompano Beach enhance its reputation as a safe place in the region and deepen our connection with the community.

Responsibilities and Organization - We serve a wide range of individuals on a daily basis: local residents, visitors from the United States and abroad, property owners, business interests, building design professionals, and contractors. The calls for assistance include – but are not limited to – medical and fire incidents, high-rise rescues, hazardous material incidents, and vehicle accidents. When they are not responding to requests for assistance, firefighters are conducting training drills and/or helping to maintain the fire station facilities as well as the apparatus equipment necessary to do their job.

More broadly, PBFR is defined by the collective efforts of 217 full-time employees[4] committed to providing quality service even in times of anxiety and budget constraint. One way to understand how the department is organized is to itemize it into major functions or divisions. The organization comprises six operating divisions that work in concert to administer its programs and carry out a multitude of activities.[5] The number of full-time employees per division is as follows

- Fire Administration 4
- Logistics 3
- Fire Operations 98
- Emergency Medical Services 85
- Fire Prevention 10
- Ocean Rescue 17

The Bureau of Fire Prevention – considered the fire safety enforcement arm of the organization - is required to perform annual inspection on all commercial and multi-residential properties in Pompano Beach. These inspections are intended to eliminate or reduce the number of hazards at these properties which contribute to the increased risk of fire within the city. Fire inspectors also review building construction plans for fire safety code compliance.

In addition to its regular functions (e.g., beach safety), The Division of Ocean Rescue has implemented a successful effort for raising awareness in water safety in Pompano Beach with the Junior Lifeguard Program which enrolls an average of 250 young adults per year through the summer camp. The program develops individuals from the ages of 9 through 17 in ocean water safety and generates about $45,000 annually.

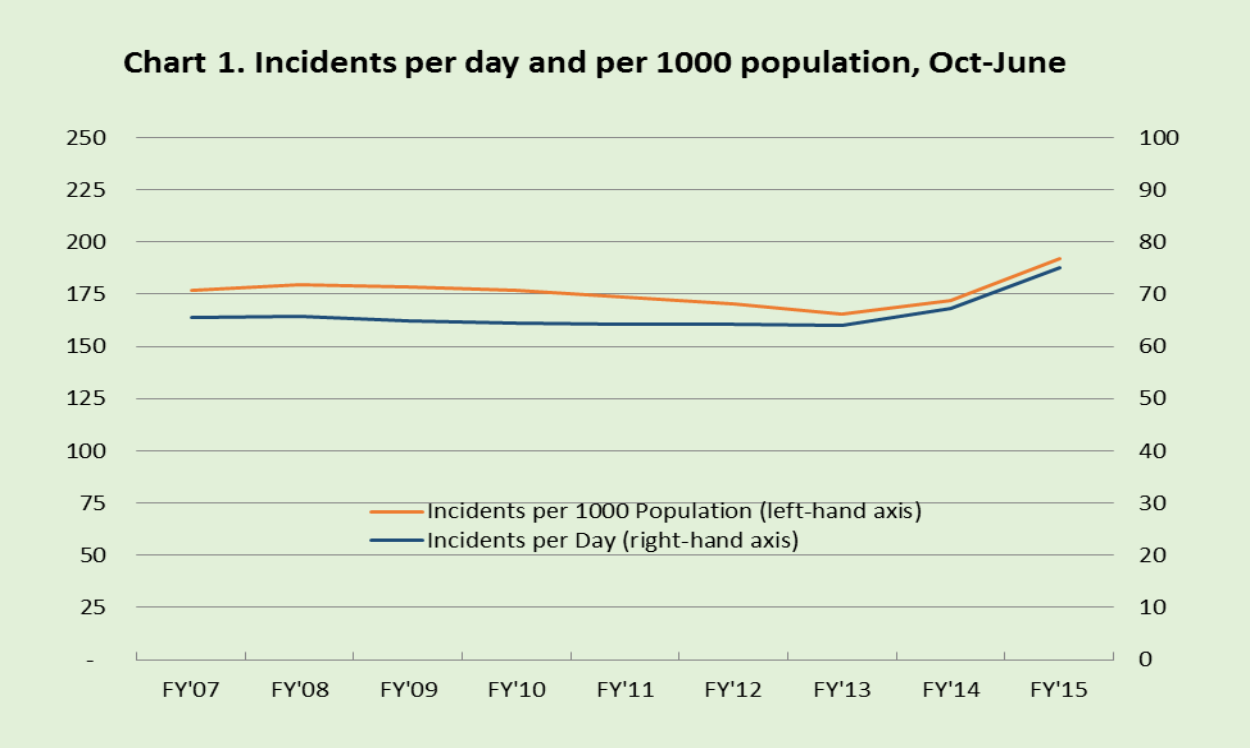
Service Cost - The FY2014 Budget totals $32.7 million, including $1.7 million allocated to Ocean Rescue. Forty three percent of the Department's funding is raised through property tax while another 40% is generated through the fire assessment program.[6] EMS transports, fire inspection fees and other revenue sources account for 16% of the department's total funding composition.

[4] And 32 part time employees: 31 lifeguards and one secretary.

[5] From a budget allocation standpoint, while the Logistics Division is part of the Fire Operations Division, two of its assigned employees' costs (one secretary and one material handling specialist) are funded through the EMS budget.

[6] The fire assessment program history goes back to 1996 and has since been updated four times. This fee pays for fire-rescue personnel costs, acquisition and replacement of fire-rescue equipment as well as expenses associated with station construction and repair. Property owners pay the fee once a year no matter how many times the fire department is called to their home or property for emergency assistance.

Emergency Response

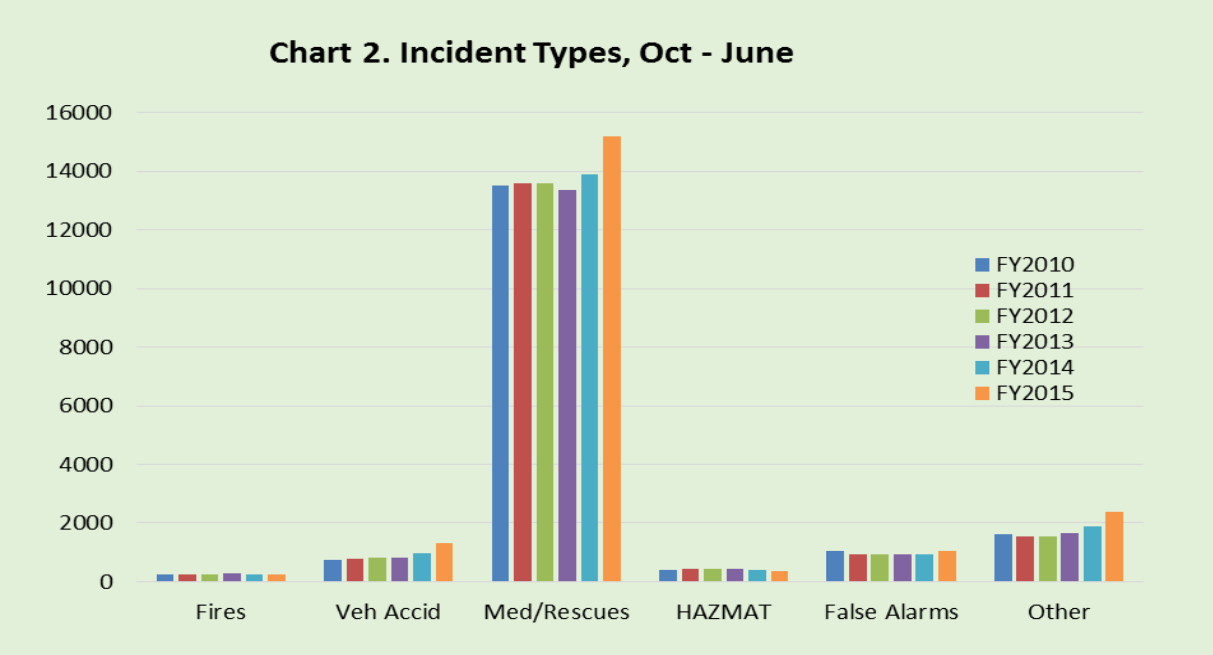


Indicator	Movement	Comment
Total Incidents	Δ	The fire department responded to 20,497 incidents[7] from October through June of FY 2015, representing an increase of 11.7% in call volume over the same period last year. This also means that during that time period the number of incidents averaged 75 per day or a total of 192 per 1000 population.[8] As a share of the total, the impact was mostly felt on Zone 52 and Zone 63 which combined for 44.6% of the calls (see Chart 3, Page 9). 62.8% of the calls occurred during the hours of 8:00am and 8:00pm - or 3.9 calls per hour during that time segment. Every day, 46 people (or 61.3% of the calls) were transported to a local hospital to receive additional care. The average was 39 from FY 2007 to FY 2014.[9]

[7] 161 of those calls are considered duplicates.

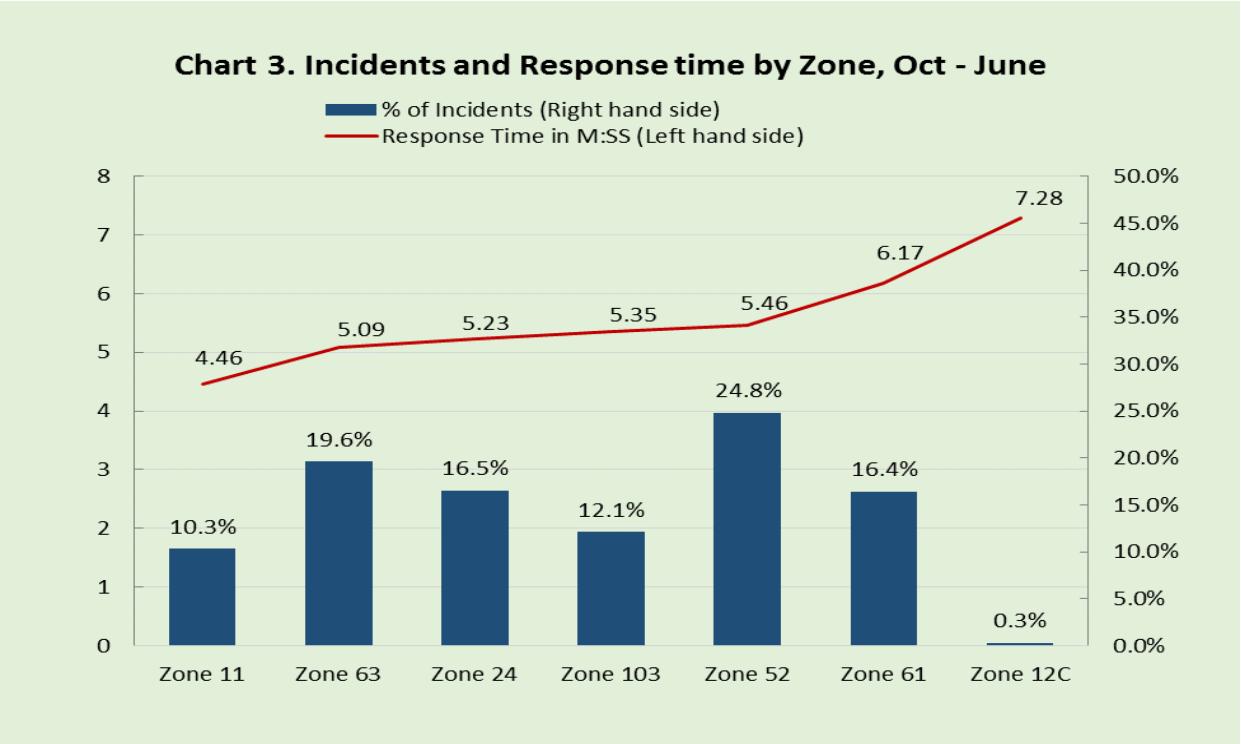
[8] Call Volume by Population Size can be misleading with respect to areas that experience vastly different day and night population levels. The city of Orlando is an example where the night and day populations differ vastly. There appears to be no evidence however that there is a significant variance in the day and night Pompano Beach population levels. Note also that Pompano Beach population was relatively stable for many years, hovering around 101,000 from 2007 to 2012.

[9] Revenue generated through EMS transports funds 11% of the department's budget.



Indicator	Movement	Comment
In recent years, the total number of incidents began to increase in 2014 and has steadily grown since (see Chart 2, above). It remains to be seen whether this upturn is for real or simply due to a temporary random variation. Chart 2 compares call volume from October through June of FY2015 for each of the preceding four comparable periods. As shown, there has been a notable increase in Medical/Rescues and Vehicle Accidents, and in the category classified as "Other." Combined, they account for over 92 percent of the call volume.		
Fire	▽	Firefighters responded to 247 fires, accounting for 1.2% of the call volume. This constitutes a 2% drop in fire calls when compared to the same period last year.
	Δ	In terms of outcome Unfortunately two fire fatalities occurred during the Oct-June stretch, bringing the total to nine since FY 2007, or an average of one per year. An estimated $2.1 million in property value was lost.
Vehicle Accident	Δ	1,293 incidents (or 6.4% of the total) were due to vehicle accidents. This is a 35.1% increase over the comparable period.
Medical/Rescue	Δ	Medical/Rescue incidents, which historically accounts for the vast majority of the calls, accounted for 15,176 of the calls or (74.8% of the total).
Hazmat	▽	362 hazmat type incidents were registered (or 1.8% of the total). Compared to the same period last year, hazmat incidents are down 12.6%
False Alarm	Δ	1,046 false alarm type calls (or 5.1% of the total).
Other	Δ	Other categories (e.g., requests for service, good intent, citizen complaint, bad weather, etc.) totaled 2,373 calls, or 11.6% share of the incidents. Good Intent was the main driver of those calls.

Average Response Time

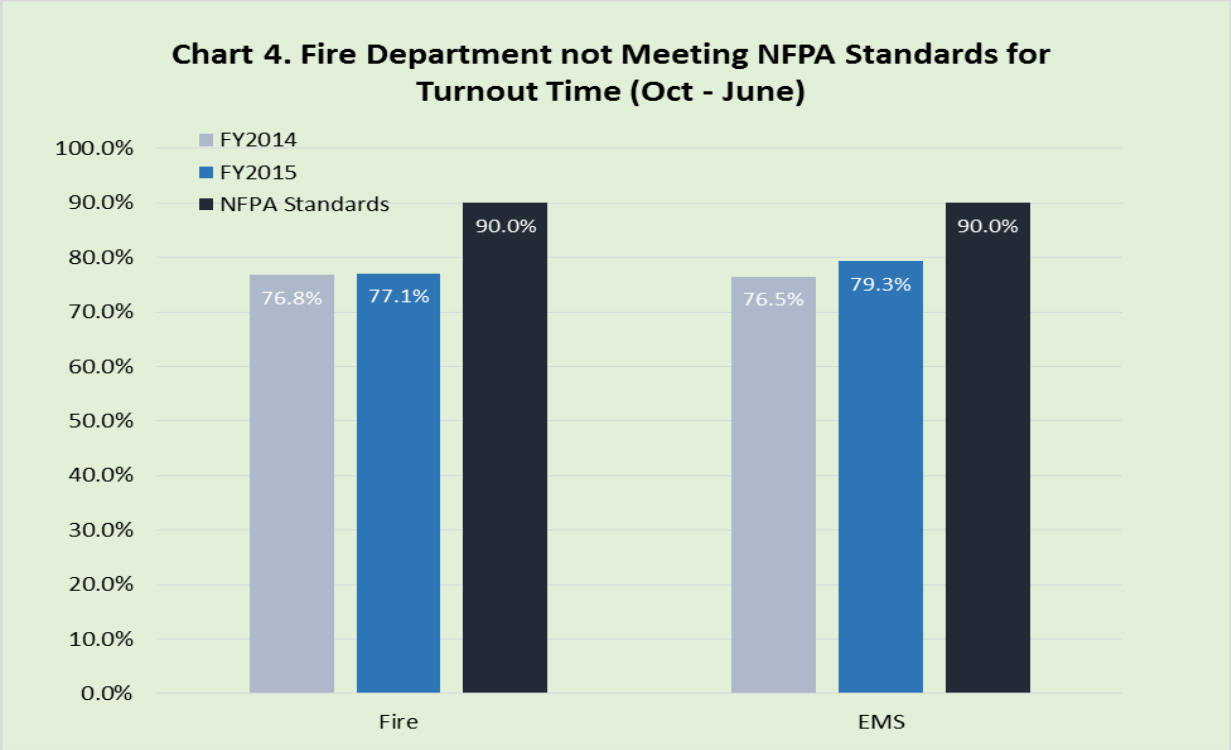


Indicator	Movement	Comment
Response time[10]	⇔	Response time in the October-June period of fiscal year 2015 averaged 5:33 minutes – virtually unchanged when compared to the same period last year during which time response time averaged 5:30 minutes. • As show in the chart above, at 4:46 minutes, Zone 11 enjoyed the lowest response time in the city. At the other extreme of the scale, Zone 61 and Zone 12C (Sea Ranch Lakes) registered 6:17 minutes and 7:28 minutes response, respectively.

[10] There are no established NFPA standards for average response time in NFPA 1710. The standard states that "the department shall establish a performance objective of not less than 90 percent for the achievement of each turnout time and travel time objective" (NFPA 1710 4.1.2.4). In other words, responses to at least 90% of incidents should be at or below the target response time. This approach – whereby a certain percent of a population meets a given criterion - is called "fractile time" measurement. Fire-rescue agencies use average response time, arguing that the average response approach is as effective as using fractile time – because, they suggest, the average computation takes into account the outliers. NFPA recommends against using averages as a measure of response time however and instead promotes fractile measurement. They point out that in reality a few isolated extreme outliers can severely skew the average – giving therefore an inaccurate picture of the organization's overall response time.

Fractile (Turnout) Time

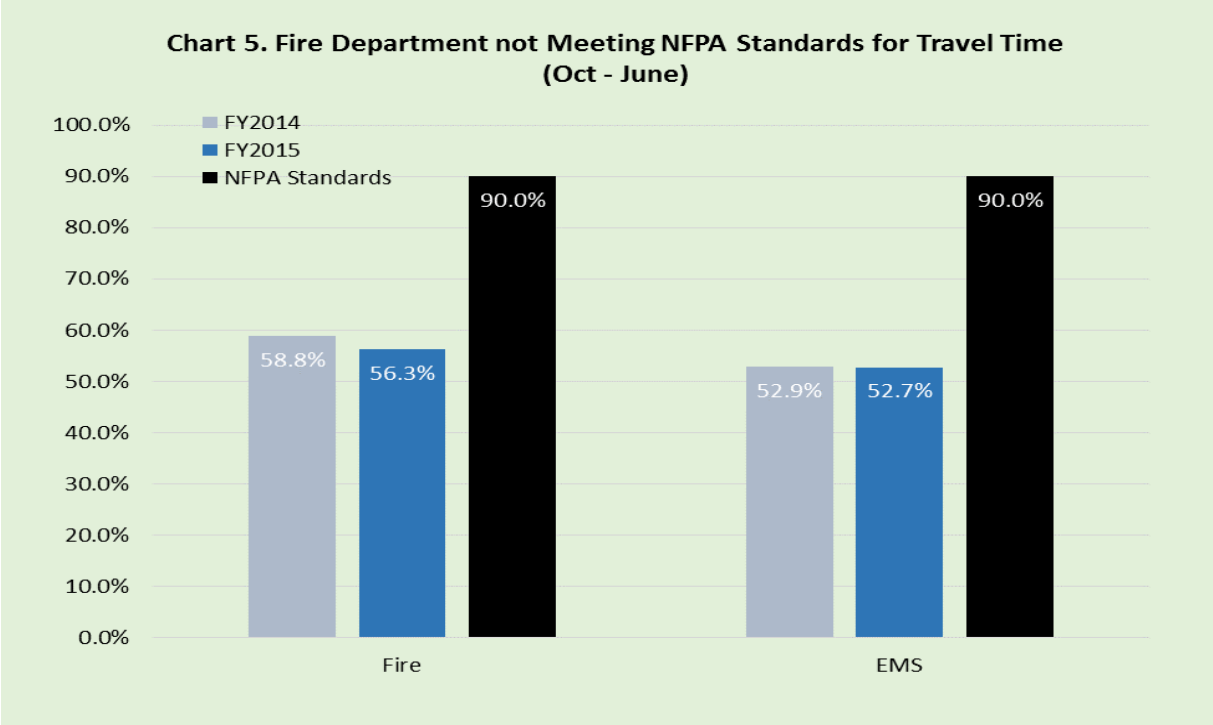
NFPA Standards
Fire Incidents: *80 seconds or less – 90% of the time*
EMS Incidents: *60 seconds or less – 90% of the time*



Indicator	Movement	Comment
When broken down by components we continue to struggle to meet the National Fire Protection Association (NFPA) standards with respect to fractile time.		
Turnout time (Fire)	Δ	77.1% - Percent of time in the Oct-June period *Turnout Time to Fire calls* was 80 seconds or less. • When compared to the same period a year ago (76.8%), turnout time to fire incidents improved marginally (77.1%). • NFPA Standards (of 80 seconds or less - 90% of the time) was not met.
Turnout time (EMS)	Δ	79.3% - Percent of time in the Oct-June period *Turnout Time to EMS calls* was 60 seconds or less. • When compared to the same period a year ago (76.5%), turnout time to EMS incidents improved (79.3%). • NFPA Standards (60 seconds or less - 90% of the time) was not met.

Fractile (Travel) Time

NFPA Standards
Fire Incidents: *240 seconds or less – 90% of the time*
EMS Incidents: *240 seconds or less – 90% of the time*



Indicator	Movement	Comment
When broken down by components we continue to struggle to meet NFPA standards with respect to fractile time, as shown above.		
Travel time (Fire)	▽	56.3% - Percent of time in the Oct-June period *Travel Time to Fire calls* was 4 minutes or less. • When compared to the same period a year ago (58.8%), travel time to fire incidents deteriorated (56.3%). • NFPA Standards (of 4 minutes or less - 90% of the time) was not met
Travel time (EMS)	⇔	52.7% - Percent of time in the Oct-June period *Travel Time to EMS calls* was 4 minutes or less. • When compared to the same period a year ago (52.9%), travel time to EMS incidents remained virtually unchanged (52.7%). • NFPA Standards (of 4 minutes or less - 90% of the time) was not met.

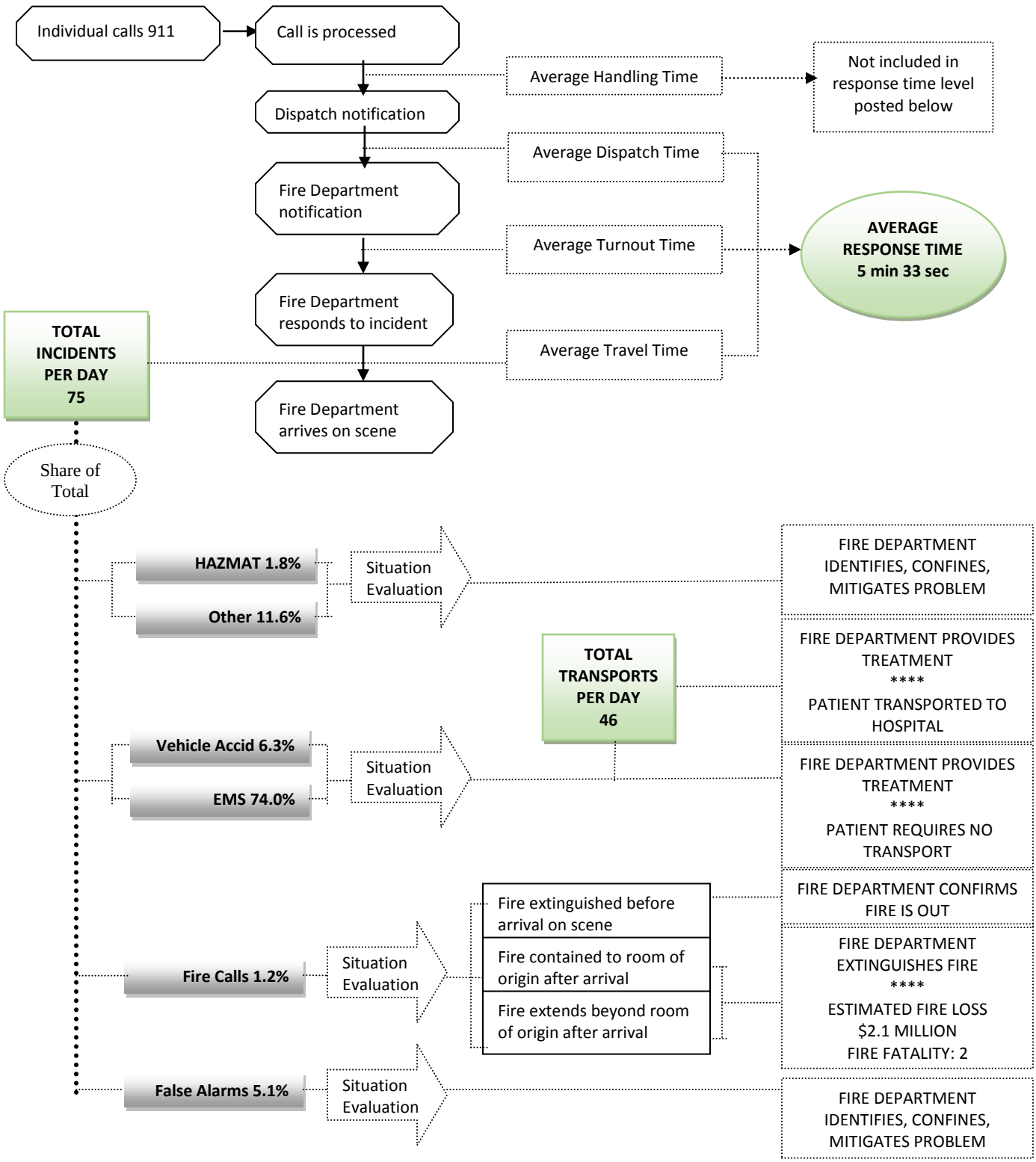
Table 1. Fractile Response Time to EMS and Fire Calls

NFPA Standards	Pompano Beach Performance							
	FY2007 YR END	FY2008 YR END	FY2009 YR END	FY2010 YR END	FY2011 YR END	FY2012 YR END	FY2013 YR END	FY2014 YR END
TURNOUT TIME								
Fire *80 seconds or less – 90% of the time*	43.2%	53.8%	71.9%	72.5%	70.4%	66.7%	70.6%	75.5%
EMS *60 seconds or less – 90% of the time*	38.4%	46.5%	59.3%	62.5%	65.3%	68.0%	73.1%	77.3%
TRAVEL TIME								
Fire *240 seconds or less – 90% of the time*	73.0%	69.3%	65.6%	59.8%	58.3%	55.3%	57.1%	57.4%
EMS *240 seconds or less – 90% of the time*	64.2%	65.4%	62.4%	59.8%	57.8%	56.1%	56.2%	53.3%

Turnout Time: NFPA 1710 3.3.53.8 defines turnout time as: "the time interval that begins when the emergency response facilities (ERFs) and emergency response units (ERUs) notification process begins by either an audible alarm or visual annunciation or both and ends at the beginning point of travel time."

Travel Time: NFPA 1710 3.3.53.7 defines Travel Time as "the time interval that begins when a unit is en-route to the emergency incident and ends when the unit arrives at the scene."

Appendix A. Incidents and Response Time Flow Chart, FY 2015: Oct-June



Appendix B. Authorized Positions and Organizations

		2000	2001	2002-2003	2004	2005-2006	2007-2009	2009-2010	2011-2013	2014	2015
ADMINISTRATION	Fire Chief	1	1	1	1	1	1	1	1	1	1
	Assistant Fire Chief	1	1	1	1	1	1	1	1	1	1
	Admin. Services Manager									1	1
	Administrative Coord.	1	1	1	1	1	1	1	1		
	Depart. Head Secretary	1	1	1	1	1	1	1	1	1	1
	Subtotal	**4**	**4**	**4**	**4**	**4**	**4**	**4**	**4**	**4**	**4**
TRAINING	Training Commander	1	1	1	1	1	1	1	1	1	1
	Training Officer	2	2	2	2	2	2	2	2	2	2
	Subtotal	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**
PREVENTION	Fire Marshal	1	1	1	1	1	1	1	1	1	1
	Fire Inspector	6	7	7	7	8	8	8	8	8	8
	Secretary	1	1	1	1	1	1	1	1	1	1
	Subtotal	**8**	**9**	**9**	**9**	**10**	**10**	**10**	**10**	**10**	**10**
OPERATIONS	Logistics Manager							1	1	1	1
	Emergency Manager						1	1	1	1	1
	Division Chief				1	1	1	1	1	1	1
	Battalion Chief			3	3	3	3	3	3	3	6
	Captain	3	3								
	Fire Lieutenant/Captain	15	17	17	15	15	15	15	15	15	15
	Driver Engineer	16	18	18	18	18	18	18	18	18	18
	Firefighter	40	50	50	57	57	57	57	57	57	57
	Subtotal	**74**	**88**	**88**	**94**	**94**	**95**	**96**	**96**	**96**	**99**
EMS	Division Chief	1	1	1	1	1	1	1	1	1	1
	EMS Captain				3	3	3	3	3	3	
	Fire Lieutenant/Captain	13	15	15	14	14	14	14	14	14	14
	Driver Engineer	10	12	12	12	12	12	12	12	12	12
	Firefighter	38	44	44	50	50	54	54	54	54	54
	Secretary	2	2	2	2	2	2	2	2	2	2
	Material Handling Spec.	1	1	1	1	1	1	1	1	1	1
	Subtotal	**65**	**75**	**75**	**83**	**83**	**87**	**87**	**87**	**84**	**81**
FIRE/EMS	**TOTAL**	**154**	**179**	**179**	**193**	**194**	**199**	**200**	**200**	**200**	**200**
OCEAN RESCUE	Lifeguard	Prior to FY2009 Ocean Rescue was part of the City's Parks and Recreation Department						14	14	14	14
	Lifeguard Lieutenant							2	2	2	2
	Lifeguard Captain							1	1	1	1
	Manager							1			
	Full Time							**18**	**17**	**17**	**17**
	Part Time							**21**	**31**	**31**	**31**

Appendix C. City of Pompano Beach Emergency Response Zones